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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/061,171	02/01/2002	Michael S. Beadle	01CON263P-CIP	1570
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FARJAMI & FARJAMI LLP 26522 LA ALAMEDA AVENUE, SUITE 360 MISSION VIEJO, CA 92691			EXAMINER HOANG, THAI D	
			ART UNIT	PAPER NUMBER
			2668	

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**Application No. 

10/061,171

Applicant(s)

BEADLE ET AL.

Examiner

Thai D. Hoang

Art Unit

2668

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Application filed on 02/01/2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 07/09/02&01/21/03.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.



## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the receiver, a processor, and a transmitter recited in claims 14 and 20 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

(a) The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 14-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification does not disclose the present application comprises "a receiver", "a processor" and "a transmitter" as recited in claims 14 and 20. Claims 15-19 and 21-25 are rejected because they depend on rejected claims 14 and 25 respectively.

(b) The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6, 12, 18 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The statement "wherein said transmitting transmits said plurality of digitized analog data signal samples via two of said one or more digital signal lines" recited in claims 6, 12, 18 and 24 is not clear. It is confusing what is meant by "*via two of said one or more digital signal lines*".

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-4, 6-9, 12-16, 18-21 and 24-25 are rejected under 35 U.S.C. 102(e) as being unpatentable over Vlajnic, US Patent No. 6,212,228 B1.

Regarding claims 1, and 14 (as best understood), Vlajnic discloses a method and system for modulation and demodulating digital data. Vlajnic teaches the system comprises and performs the steps of:

A central office 120 receives analog signals over telephone line 171 from a modem 110. See col. 1, lines 63-67, figs.1A and 2A (receiving an analog data signal over a telephone line from a first modem);

The received analog signals are converted to digital signals by using PCM technique at the central office 120, col. 2, lines 55-58, figs.1A and 2A (utilizing a linear coding process to generate a plurality of digitized analog data signal samples from said analog data signal);

The converted digital signals are transmitted to a modem 150 (fig. 1A) or modem 230, see figs. 2A-B (transmitting said plurality of digitized analog data signal samples via said one or more digital signal lines to a second modem).

Regarding claims 2-3, 9, 15 and 21, Vlajnic discloses that the central office encodes 24 channels of the T1 line, wherein each channel transmits 64 Kbps. It indicates that the system disclosed by Vlajnic encodes 128 kbps (2 channels) and 256 kbps (4 channels), col. 3, line 39-col. 4, line 45 (wherein said linear coding process uses a sampling rate of about 16 kHz, 32 kHz with an 8 bits/sample)

Regarding claim 4 and 16, Vlajnic discloses that the modem 230 locates at a remote access server (RAS) 210, fig. 2A-B (wherein said second modem is a remote access server modem).

Regarding claims 6, 12, 18 and 24, as best understood, Vlajnic discloses that the converted digital signals are transmitted in T1 lines 211 (wherein said transmitting transmits said plurality of digitized analog data signal samples via two of said one or more digital signal lines).

Regarding claims 7, 13, 19 and 25, Vlajnic discloses that a V.34 (115.2 Kbps) modem could be adapted with the system, col. 5, lines 34-36 (said method further comprises determining said first modem to be capable of supporting a speed of 64kbps or more).

Regarding claims 8 and 20 (as best understood), Vlajnic teaches the system comprises and performs the steps of:

A central office 120 receives analog signals over telephone line 171 from a modem 110. See col. 1, lines 63-67, figs. 1A and 2A (receiving an analog data signal over a telephone line from a first modem);

The received analog signals are converted to digital signals by using PCM technique at the central office 120, col. 2, lines 55-58, figs. 1A and 2A (utilizing a linear coding process to generate a plurality of digitized analog data signal samples from said analog data signal);

The converted digital signals are transmitted to a modem 150 (fig. 1A) or modem 230 (see figs. 2A-B) by multiplexing in time domain, see col. 4, lines 30-35 (transmitting

said plurality of digitized analog data signal samples via said one or more digital signal lines of said first time division multiplexed bus to a second modem);

The modem 230 (figs. 2A and 3) or 400 (fig. 4) inherently performs the step of demodulating of the received digital signals because the main functions of a modem are modulation and demodulation (demodulating said plurality of digitized analog data signal samples by said second modem to generate digital data).

The digital signals are multiplexed and transmitted to end device 220 by a link 212. Figs. 2-4 (transmitting said digital data by said second modem over one or more digital signal lines of a second time division multiplexed bus).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 11, 17 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vlajnic as applied to claims above, and in view of Tanimoto et al, US Patent No. 6,075,776, hereinafter referred to as Vlajnic and Tanimoto respectively.

Regarding claims 5, 11, 17 and 23, Vlajnic does not disclose the modem of the remote access server (RAS) receives digital signals over an IP link. However, Tanimoto discloses a system and method for controlling VLAN. Tanimoto teaches a RAS receives digital data from remote networks 20 and 30 over IP link 40. Figure 1, col. 3, lines 56-62. It would have been obvious to one of ordinary skill in the art at the time the invention

was made to apply system configuration disclosed by Tanimoto into Vlajnic's system in order to adapt with IP network.

Claims 10 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vlajnic as applied to claims above, and in view of Stockman et al, US Patent No. 6,785,340 B1, hereinafter referred to as Vlajnic and Stockman respectively.

Claims 10 and 22, Vlajnic does not disclose the modem is a digital loop carrier modem. However, Stockman discloses a universal digital loop carrier system, which comprises a digital modem 100 (fig. 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Stockman's system into the system disclosed by Vlajnic in order to allow the modem could be installed at different places in the network.

### ***Conclusion***

Examiner cites specific portions that relevant to the claims of the present applications from the reference(s). However, Applicants are requested to read all of the references for understanding the system disclosed in the references.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following references are cited to further show the state of the art with respect to the application:

US Patent No. 6,396,911 B1, Kostan et al, "Method and apparatus for efficient improved data transmissions on telephone links between service providers and remote clients."



US Patent No. 6,498,806 B1, Davis, "Shared asymmetric digital subscriber line modem."

US Patent No. 6,954,463 B1, Ma et al, "Distributed packet processing architecture for network access servers."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai D. Hoang whose telephone number is (571) 272-3184. The examiner can normally be reached on Monday-Friday 10:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Chieh can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thai Hoang



**HANH NGUYEN  
PRIMARY EXAMINER**